

IN THE CLAIMS

(1) Please cancel claims 1-17, in their entirety, without prejudice or disclaimer of the subject matter contained therein.

(2) Please add new claims 18- 38, as shown in the following listing of the status of all pending claims:

[c1]- [c17] cancelled

[c18] (New) A fastener comprising:

- a) a plate having
 - i) a substantially planar lower surface,
 - ii) an upper surface opposing said lower surface,
- b) a polygonal shaped cavity of uniform lateral cross-section extending downward toward the lower surface of said plate for receiving in mated engagement a non-circular portion of a bolt selected from the group consisting of a bolt head and a nut,
- c) a circular bore extending upward from said lower surface to penetrate a portion of said central cavity, being co-axially disposed thereto such that the non-circular portion of a bolt is retained in said cavity with the shaft of the bolt extending through said circular bore,
- d) a peripheral region disposed between the edge of the fastener and the central bore wherein said peripheral region of the fastener is thinner than the portion of the fastener adjacent said cavity,
- e) one or more holes disposed in said peripheral region extending between the upper and lower surface to secure the fastener to an object in contact with the lower surface thereby preventing rotation about said circular bore.

[c19] (New) A fastener according to claim 18 further comprising a plurality of holes equally spaced about the periphery of the circular bore between the edge of the fastener and said cavity.

[c20] (New) A fastener according to claim 18 wherein the fastener is thinner in regions circumscribing each of said holes than in the region adjacent said cavity.

[c21] (New) A fastener according to claim 20 wherein the thinner peripheral regions around each hole are separated by a plurality of ribs.

[c22] (New) A fastener according to claim 21 wherein the ribs taper in thickness from the portion of the fastener adjacent to said cavity toward the thinner peripheral region adjacent each hole.

[c23] A fastener according to claim 21 wherein the portion of the area around each hole adjacent to said cavity is a flat area bounded by an arc connecting each of the adjacent ribs.

[c24] (New) A fastener according to claim 18 wherein the polygonal shape has six sides.

[c25] (New) A fastener according to claim 18 further comprising a member having a linear edge with the substantially planar lower surface and extending orthogonally outward there from.

[c26] (New) A fastening system comprising;

- a) a bolt comprising a threaded shaft terminated by a non- circular head,
- b) at least one annular plate having;
 - i) a substantially planar lower surface,
 - ii) an upper surface opposing said lower surface,
 - iii) a polygonal shaped cavity of uniform lateral cross-section extending downward toward the lower surface of said plate for receiving in mated engagement the non-circular head of said bolt,
 - iv) a circular bore extending upward from said lower surface to penetrate a portion of said central cavity, being co-axially disposed thereto such that the non-circular portion of a bolt is retained in said cavity with the shaft of the bolt extending through said circular bore,

- v) a peripheral region disposed between the edge of the annular plate and the central bore wherein said peripheral region of the fastener is thinner than the portion of the annular plate adjacent said cavity,
- vi) one or more holes disposed in said peripheral region extending between the upper and lower surface to secure the annular plate to an object in contact with the lower surface thereby preventing rotation about said circular bore.

- c) a nut disposed on the threaded shaft to grasp one or more objects or structures disposed between the nut and bottom planar surface of said annular shaped member,
- d) whereby the securing of said annular shaped member to the object precludes axial rotation about the threaded shaft and prevents the non-circular head from rotating as the nut is advanced along the threaded shaft to secure the object.

[c27] (New) A fastening system according to claim 26 further comprising a second annular plate disposed on the opposite end of the shaft between said nut and said first annular plate for receiving said nut in the polygonal shaped cavity thereof such that securing the second annular plate to the opposite side of the fastened object via the one or more holes precludes the loosening of said nut after tightening.

[c28] (New) A fastening system according to claim 26 wherein said annular plate comprises a plurality of holes equally spaced about the periphery of the circular bore between the edge of said annular plate and the cavity therein.

[c29] (New) A fastening system according to claim 26 wherein said annular plate is thinner in regions circumscribing each of said holes than in the region adjacent said cavity and the holes are separated by a plurality of ribs.

[c30] (New) A fastening system according to claim 29 wherein the ribs of said annular plate taper in thickness from the portion of the fastener adjacent to said cavity toward the thinner peripheral region adjacent each hole.

[c31] (New) A fastening system according to claim 26 wherein said annular plate comprises a member having a linear edge with the substantially planar lower surface and extending orthogonally outward there from.

[c32] (New) A fastening system comprising:

- a) a bolt comprising a threaded shaft terminated by a non-circular head,
- b) a mating nut disposed about the threaded shaft,
- c) a first and second annular shaped member that comprises
 - i) a plate having
 - (1) a substantially planar lower surface,
 - (2) an upper surface opposing said lower surface,
 - ii) a polygonal shaped cavity of uniform lateral cross-section extending downward toward the lower surface of said plate for receiving in mated engagement either the non-circular head of said bolt or said nut,
 - iii) a circular bore extending upward from said lower surface to penetrate a portion of said central cavity, being co-axially disposed thereto such that for
 - (1) the first annular shaped member, the non-circular portion of the bolt is retained in said cavity with the shaft of the bolt extending through said circular bore, and
 - (2) for the second annular shaped member, the nut is retained in said cavity with the threaded end of said shaft extending through said circular bore,
 - iv) a peripheral region disposed between the edge of the fastener and the circular bore wherein said peripheral region of the fastener is thinner than the portion of the fastener adjacent said cavity,
 - v) one or more holes disposed in said peripheral region extending between the upper and lower surface to secure the fastener to an object in contact with the lower surface thereby preventing rotation about said circular bore.
- d) wherein the substantially planar surface of said first annular shaped member is disposed facing the substantially planar surface of said second annular shaped member,

e) whereby securing the first annular shaped members to the object via the one or more holes precludes axial rotation of the bolt so as to permit tightening of said nut, and the subsequent securing of the second annular shaped members to the object via the one or more holes prevents the nut from reversing direction to either loosen the grip on the object or unthread from the shaft.

[c33] (New) A fastening system according to claim 32 wherein at least one of said first and second annular members further comprises a plurality of holes equally spaced about the periphery of the circular bore between the edge of the fastener and said cavity.

[c34] (New) A fastening system according to claim 33 wherein for at least one of said first and second annular members is thinner in regions circumscribing each of said holes than in the region adjacent said cavity with each thinner region being separated by a rib extending from the central cavity to the periphery of the annular member.

[c35] (New) A fastening system according to claim 34 wherein the ribs taper in thickness from the portion of the fastener adjacent to said cavity toward the thinner peripheral region adjacent each hole.

[c36] (New) A method of fastening a first structure to a second structure, the method comprising:

- a) providing one or more holes that traverse an overlapping area of the structures to receive a cylindrical shaft, the shaft having a threaded end and a non-circular bolt end,
- b) providing a first and second annular washer having:
 - i) a substantially planar lower surface,
 - ii) an upper surface opposing the lower surface,
 - iii) a polygonal shaped cavity of uniform lateral cross-section extending downward toward the lower surface of the washer for receiving in mated engagement a non-circular portion of a bolt selected from the group consisting of a bolt head and a nut,

- iv) a circular bore extending upward from said lower surface to penetrate a portion of said central cavity, being co-axially disposed thereto such that the non-circular portion of a bolt is retained in said cavity with the shaft of the bolt extending through said circular bore,
- v) a peripheral region disposed between the edge of the washer and the central bore wherein said peripheral region of the washer is thinner than the portion of the washer adjacent said cavity,
- vi) one or more holes disposed in said peripheral region extending between the upper and lower surface to secure the fastener to an object in contact with the lower surface thereby preventing rotation about said circular bore,

- c) placing the first annular washer on the shaft, such that the bolt head engages within the central cavity thereof,
- d) inserting the shaft through the hole such that the flat face of the washer is adjacent the outer surface of the first structure with the threaded end extending to protrude from the second structure,
- e) securing the first washer to the first structure by inserting a nail or screw through one or more of the holes to prevent rotation about the shaft,
- f) inserting a second annular washer onto the threaded shaft, the flat face disposed toward the second structure,
- g) threading a nut onto the shaft as the non-circular head locks into the cavity of the first washer to prevent rotation of the threaded bolt,
- h) rotating the nut to advance it toward the fastener to urge the flat face of the second annular washer against the second structure, such that both the first and second washer grasp and compress the first and second structure.

[c37] The method of claim 36 further comprising the step of securing the second annular washer to the second structure by inserting a nail or screw through one or more of the holes to prevent rotation about the shaft.

[c38] The method of claim 35 wherein at least one of the first and second washer comprise a plurality of holes equally spaced about the periphery of the circular bore between the edge of the fastener and said cavity.